



An updated directory structure for Unix

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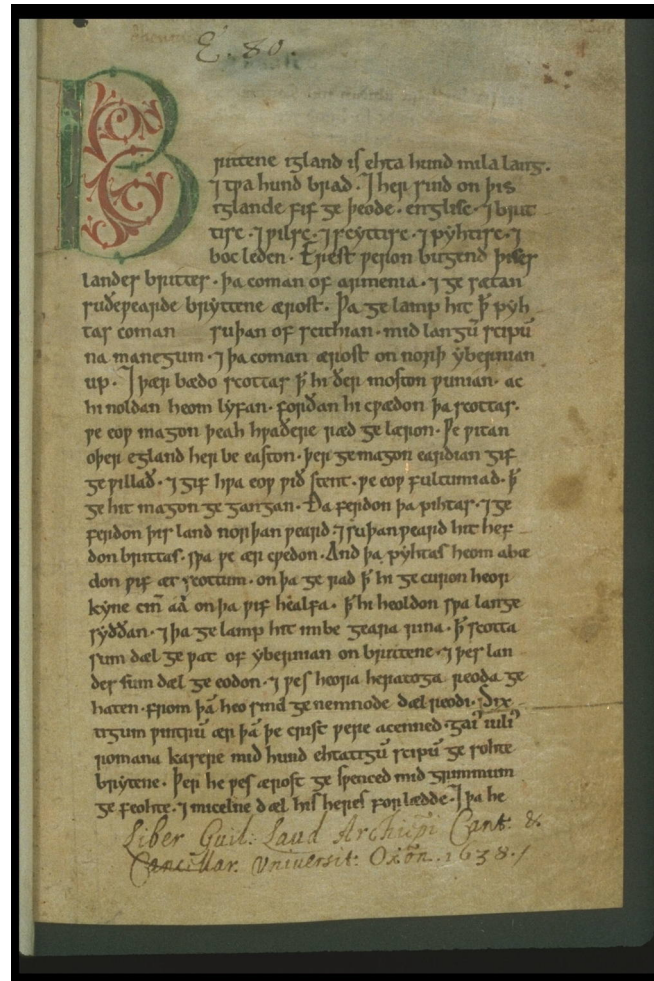
Wellington, January 22 2010

Overview

The big idea:

- One directory per program, one program per directory
- Use that to represent package data

History



Layout



<http://icanhascreezburger.com/2010/01/18/funny-pictures-comfort-perspective/>

Tree

FHS	/System/Links	/System/Index
/bin	/System/Links/Executables	/System/Index/bin
/lib	/System/Links/Libraries	/System/Index/lib
/sbin	/System/Links/Executables	/System/Index/sbin
/etc	/System/Settings	
/usr	/	/System/Index
/usr/local	/usr	
/usr/X11R6	/usr	
/mnt	/Mount	
/dev	/System/Kernel/Devices	
/sys	/System/Kernel/Objects	
/proc	/System/Kernel/Status	

Advantages and Implications

- Manipulability
- Parallelism
- Unpackaged software

Tools

- DisableProgram
- RemoveProgram
- SymlinkProgram
- Compile
- InstallPackage
- DetachProgram and AttachProgram

Compile

Simplest possible recipe:

```
url=http://example.com/foo-1.3.tar.bz2  
recipe_type=configure
```

A more complex example

```
compile_version=1.8.5
url="http://samba.org/samba/ftp/stable/samba-3.4.1.tar.gz"
file_size=34977059
file_md5=f857c534148e28b686996d232da76cec
mirror_url="ftp://us4.samba.org/pub/samba/old-versions/samba-3.4.1.t
recipe_type=configure
dir="samba-3.4.1/source3"
configure_options=(
    "--with-automount"
    "--with-piddir=${variable_target}/run/samba"
)
with_acl="--with-acl-support"
install_variables=(
    exec_prefix="${target}"
)
pre_install() {
    mkdir -p ${variable_target}/{locks,run,log}/samba
}
```

InstallPackage



<http://www.flickr.com/photos/ieatwaffles/3481884396/>

DetachProgram and AttachProgram

- Decouple the physical location from the logical

Alternative approaches

- Stow, Encap, Depot
- NixOS
- OS X

Aliens



<http://www.flickr.com/photos/jurvetson/536728722/>

- CPAN, LuaRocks, RubyGems, ...

Use flags



<http://www.flickr.com/photos/nyllows/3633429935/>

- Automatic flags from installed programs
- Generic flags covering a family of implementations

Rootless

- GoboLinux-like layout in \$HOME
- Works within GoboLinux and some other systems

Links

- <http://www.gobolinux.org/>
- <http://blog.gobolinux.org/>
- #gobolinux on freenode
- michael@gobolinux.org and <http://mwh.geek.nz/>

